

## **REQUEST FOR INFORMATION (RFI) / SOURCES SOUGHT**

**Solicitation Number: 89303320REM000076**

Date: August 5, 2020

**Title: Savannah River Site Operations Acquisition Requirement**

**THIS IS NOT A REQUEST FOR QUOTE OR PROPOSAL. THIS IS A REQUEST FOR INFORMATION (RFI) AND SOURCES SOUGHT ONLY.**

### **(1.0) Introduction:**

No solicitation exists at this time. This RFI/Sources Sought is released pursuant to Federal Acquisition Regulation (FAR) Part 10, Market Research, and FAR 15.201, Exchanges with Industry before Receipt of Proposals, for the purposes of public engagement and conducting market research.

The U.S. Department of Energy (DOE), Office of Environmental Management (EM), is currently in the acquisition planning stage for the Savannah River Site (SRS) "SRS Operations Acquisition." The anticipated services to be acquired will be performed at SRS, a 310 square mile (198,344 acres) site that is located in the sand-hills region of South Carolina. SRS encompasses parts of Aiken, Barnwell and Allendale counties and is bordered on the west by the Savannah River and Georgia. SRS was constructed during the early 1950s to produce basic materials used in fabrication of nuclear weapons, primarily tritium and plutonium-239, in support of our nation's defense programs.

The prospective contract will result in the successful operation of the Savannah River Site (SRS). SRS is a multi-program site that involves various missions for Environmental Management (EM) and National Nuclear Security Administration (NNSA). The EM and NNSA missions are national interest programs that must be continued to complete environmental cleanup, achieve nuclear materials management, and support nuclear weapons stockpile and nonproliferation requirements at one-of-a-kind facilities at SRS.

The SRS cleanup strategy is to eliminate or minimize nuclear materials, spent nuclear fuel (SNF), and waste through safe stabilization, treatment, and/or disposition; reduce costs of continuing operations and surveillance and maintenance; and decommission facilities, as well as remediate surface water, groundwater and contaminated soils consistent with regulatory agreements and permits. The Department's completion strategy provides a comprehensive risk-based methodology to the legacy cleanup project, through the storage, treatment and disposition of Transuranic Waste (TRU), Low-Level Waste (LLW), Mixed Low-Level Waste (MLLW), hazardous waste, and sanitary waste, as well as through pollution prevention, waste minimization, waste certification, and other waste management support functions as part of the general operations of the burial ground complex at the Solid Waste Management Facility. This strategy will use existing SRS facilities to receive, store, and disposition

aluminum and non-aluminum-clad (SNF), and decommissioning all facilities not required for continuing missions.

The NNSA Nuclear Security Activities at SRS include program support and operation of facilities supporting Weapons Activities, Nonproliferation, Nuclear Security and Nuclear Counterterrorism activities. This acquisition includes programs supporting four major subprograms that directly support the Nation's nuclear weapons stockpile: (1) Stockpile Major Modernization; (2) Sustainment; (3) Dismantlement and Disposition; and (4) Production Operations. The Defense Programs also support the Engineering and Integrated Assessment program to ensure weapons performance, reliability, safety, survivability and responsiveness. The contract also supports the Nuclear Nonproliferation Programs at SRS including the Waste Solidification Building (WSB), Mobile Plutonium Facility, International (Nonproliferation) Programs, and the Foreign Research Reactor (FRR) Fuel Program. Further, the effort shall also provide scientific, technical, program, and project expertise to support the Surplus Plutonium Disposition (SPD) Program. The Nuclear Emergency Support Team (NEST) shall provide radiological protection professionals to support the DOE Region 3 Radiological Assistance Program (RAP) and Aerial Measuring System (AMS) Assets. Additional activities include infrastructure operations program work to operate, maintain, and modernize the NNSA sponsored facilities (tritium and plutonium pit (when operations)) and support infrastructure to maintain a safe, secure, and cost-effective state of readiness support of weapons activities mission requirements while minimizing mission risks.

DOE-EM is the landlord for the SRS and responsible for cleanup missions. The National Nuclear Security Administration (NNSA) is responsible for supporting the nuclear weapons stockpile programs and nonproliferation activities on the Site. This RFI is part of the market research phase for the follow-on procurement to the current SRS Management and Operating (M&O) contract, DE-AC09-08SR22470, with Savannah River Nuclear Solutions (SRNS). The current contract has a period of performance ending on September 30, 2021 and a total value of ~\$14.7 billion. There is one twelve (12) month option remaining on the contract. Further information can be found here: <https://www.energy.gov/srs/downloads/savannah-river-nuclear-solutions-llc-contract>.

The Savannah River National Laboratory (SRNL) is being procured under a separate acquisition. Information regarding this acquisition can be found here: [https://www.emcbc.doe.gov/SEB/sr\\_national\\_lab/](https://www.emcbc.doe.gov/SEB/sr_national_lab/).

The Nuclear Materials Stabilization and Disposition scope is also included as optional effort in the acquisition for the SRS Integrated Mission Completion Contract (IMCC). Information regarding this acquisition can be found here: <https://www.emcbc.doe.gov/SEB/SRSIMC/>

### **Request for Information.**

One objective of this notice is to gather input from interested parties and stakeholders about opportunities to enhance the successful accomplishment of the Savannah River Site (SRS) "SRS Operations Acquisition" and the means of realizing those opportunities. Such input will

assist EM in formulating its acquisition strategy and in preparing the anticipated Request for Proposals (RFP).

### **Sources Sought.**

Another purpose of this notice is to solicit input from interested parties with the specialized capabilities necessary to meet all or part of the requirements of the elements of scope in anticipation of the upcoming competitive procurement(s) for the SRS Operations Acquisition (requirement). Within these capability statements, DOE is seeking feedback from interested parties regarding options for innovative approaches for the performance of the major Elements of Scope as well as insight into potential contracting alternatives. This market research will assist DOE in identifying interested and capable sources and in developing its acquisition strategy. Key market research goals include identifying and minimizing barriers to competition, evaluating small business capabilities, identifying risks, identifying potential requirements definition and contract alternatives, and identifying appropriate terms and conditions.

Due to the preliminary stage of this planning activity, there is only a Scope of Work available at this time. The anticipated number of procurements, types of contracts, periods of performance, amount of funding, or set aside possibilities are to be determined. The draft Elements of Scope are attached to this RFI and are also included on the below noted webpage.

The EM Consolidated Business Center (EMCBC) has created a procurement website where additional information is provided which may be viewed at

<https://www.emcbc.doe.gov/seb/SRSOperations/>

Information posted on the EMCBC procurement website will be updated as it becomes available; therefore, interested parties should monitor the EMCBC procurement website for additional information. DOE may or may not respond to or post on the EMCBC procurement website any verbal/written questions or comments pertaining to this RFI package.

DOE is also seeking to determine whether a portion of the requirement can be set-aside for small businesses, 8(a) small business, small disadvantaged business, economically disadvantaged women-owned small businesses, HUBZone small businesses, veteran-owned small businesses, or service-disabled veteran-owned small businesses. Small businesses believing that they have the capability to perform all or a portion of the work in the respective major Elements of Scope are welcome to demonstrate their capabilities. The North American Industry Classification System (NAICS) code for this requirement is anticipated to be 562910, Environmental Remediation Services, and the small business size standard is 750 employees.

## Capability Statements:

Capability Statements should include the following information as appropriate and applicable:

- 1) Describe your ability and approach, including rationale, to meeting all or a portion of the specific scope elements. DOE is interested in cutting edge thinking, innovativeness, and other ways for DOE to maximize its effectiveness in accomplishing work safely and efficiently through technology. Discuss your experience in implementing new and innovative technologies or process improvements, including the utilization of an effective performance management program.
- 2) Describe your ability and experience performing the major Elements of Scope identified over the past 5-years. Identify 3-5 Government and/or commercial experience relevant to this sources sought notice [include contract number, role in the effort (i.e., prime contractor or subcontractor), period of performance, dollar value, scope, client, and contracting agency contact information].
- 3) Provide approaches for the division or aggregation of scope elements (e.g., management of nuclear pit production/tritium facilities and remediation services separated into different contracts; site infrastructure services under a separate contract), including rationale and insight into contracting alternatives [number of procurement(s), types of contract(s), periods of performance, set aside possibilities, incentives for execution of work in a significantly more cost efficient manner, M&O versus other contract type, etc.] to achieve the Elements of Scope.
- 4) Identify challenges and risks (technical, regulatory, schedule, financial, funding availability, and any others) in performing the scope elements. Identify how your organization would mitigate any risks (including recommendations for DOE) such that there is reasonable assurance of successful performance. Also, identify and provide your rationale regarding how a specific division and/or aggregation of scope element(s) or potential contracting alternatives could be utilized to mitigate such risks. Describe any challenges and risks that would prevent your company from proposing on potential procurements.
- 5) Identify potential areas, including rationale, within any element of scope that may be appropriate for a fixed price contract structure along with any associated pricing challenges and risks. Provide specific feedback for type of information required from DOE to support development of a fixed price for any element of scope.
- 6) Discuss your company and/or teaming arrangement's experience in managing and integrating the major Elements of Scope under a single contract. Also, describe your relevant work and approach to cost effectively manage and integrate the work of Teaming Subcontractors who would perform specialty functions such as capital asset

projects and perform core functions such as safety, etc. Further, provide input regarding ways to identify meaningful work to be accomplished by small businesses.

- 7) Describe your experience in a complex regulatory environment with respect to problem-solving, working with various stakeholders, Citizens Advisory Boards, and regulatory agencies at the state and federal level.
- 8) This work will be conducted throughout multiple complexes and facilities within SRS and will require interfaces with multiple other site contractors. Discuss your experience regarding such interfaces.
- 9) It is anticipated the prospective contractor(s) will be required to participate in the multiple employer pension and welfare benefits plans for the existing workforce. Please describe your experience in establishing and managing a multiple employer or single employer defined benefit pension plan. Additionally, please briefly describe your approach to establishing and maintaining complicated pension and welfare (including Pension, Post-Retirement Benefits and severance) benefit plans as well as your ability to obtain the expertise to establish and manage such plans.
- 10) Provide input and rationale to DOE on the optimal base period and total period of performance for the prospective procurement(s). Highlight any factors that would make competing for these contracts desirable or undesirable for your firm, including input on proposal evaluation criteria. Discuss any issues the Contracting Officer should consider when developing the solicitation for this requirement.
- 11) Identify any Organizational Conflicts of Interest (OCIs) concerns and/or potential OCIs that you or your teaming partners may have pertaining to the work described in this RFI.

## **Interested Parties**

Interested parties are requested to provide name of firm, point of contact, phone number, address of firm, CAGE Code, and/or a DUNS Number(s) used over the past 5 years. Small business teams or joint ventures shall identify the socio-economic status of each member and shall provide the capabilities of each member, as well as a description of the work that each member would perform under a contract, keeping in mind the requirements of FAR Clause 52.219-14, Limitations on Subcontracting (if any portion of the effort is to be set-aside for small businesses).

All interested parties are hereby invited to submit a capability statement of no more than 15 pages, with no smaller than 12-point font and no more than **20 megabytes (MB) total for an electronic transmission to the procurement mailbox**. All capability statements shall be submitted electronically to [SRSOperations@emcbc.doe.gov](mailto:SRSOperations@emcbc.doe.gov) no later than 3:00 p.m. Eastern Time on Wednesday, August 26, 2020:

DOE personnel may contact firms responding to this announcement to clarify a responder's capabilities and other matters as part of this market research process. The Government will review each capability statement based on the interested parties' (and that of teaming partners when applicable) demonstrated qualifications, capabilities, expertise, experience and past performance in each area of scope within their field of expertise.

DOE reserves the right to use any and all information submitted by, or obtained from, an interested party in any manner DOE determines is appropriate, including, but not limited to, the creation of a competitive solicitation. An interested party should avoid including any business confidential, and/or proprietary information in its response. However, if an interested party must submit such information, the information must be clearly marked accordingly, and the interested party must provide sufficient justification as to why such information is business confidential and/or proprietary. DOE will review said information and safeguard it appropriately.

### **Reimbursement of Preparation Costs**

The Government will not reimburse preparation costs nor otherwise provide compensation for any information that is provided in response to this announcement.

**THIS ANNOUNCEMENT IS NOT AN RFP AND SHALL NOT BE CONSTRUED AS A COMMITMENT BY THE GOVERNMENT TO AWARD A CONTRACT AT THIS TIME.**

Contracting Officer:

Mr. Paul Smith  
513-246-1358  
[paul.smith@emcbc.doe.gov](mailto:paul.smith@emcbc.doe.gov)

## **(2.0) GENERAL INFORMATION**

### **(2.1) Scope of Work – General**

Under this Performance Based Management Contract (PBMC), the Contractor shall furnish the necessary personnel, facilities, equipment, materials, supplies, and services (except those provided by the Government) to accomplish the Scope of Work. The Scope of Work under this PBMC is comprehensive in that the Contractor shall perform all necessary technical, operational and management functions to manage and operate SRS and perform the missions assigned to the Site. This encompasses all on-going SRS missions and activities as described herein as well as any new activities or missions that may be assigned during the term of the contract. This PBMC includes such areas as infrastructure management and maintenance; human resource management including critical skills recruitment and retention; environmental management and remediation; health, safety and security systems; and, purchasing and other administrative systems.

Under this PBMC, the Contractor shall develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the missions of the Site. The DOE expects the Contractor to produce effective and efficient business and technical management structures, systems, and operations that maintain high levels of safety and quality in accomplishing the work required under this contract. The Contractor shall conduct all work in a safe and secure manner that is fiscally responsible, optimizes productivity, minimizes waste, and fully complies with all applicable laws, regulations, and terms and conditions of the contract.

The Contractor shall challenge existing paradigms in formulating and implementing safe, secure, high quality, timely, and cost-effective programs and operations at SRS. The Contractor shall use appropriate subcontracting and other innovative methods of accomplishing this Scope of Work consistent with the most efficient and effective means of performance. The Contractor shall tailor the application of contract requirements to the work being performed to be cost effective while safely and securely accomplishing all work in a manner that minimizes risk and fully complies with all compliance agreements, pollution abatement programs, and permit requirements (as required by DEAR 970.5204-2 “Laws, Regulations and DOE Directives”). The Contractor shall implement a comprehensive and integrated contractor assurance system in accordance with DOE Order 226.1B, Implementation of Department of Energy Oversight Policy.

Safe and secure performance of work is an integral part of mission accomplishment at SRS and shall be integrated as a core value into all activities. The Contractor shall systematically integrate safety, security, and environmental protection into management and work practices at all levels so that missions are accomplished while protecting the public, the worker, and the environment. This is to be accomplished through effective integration of safety management into all facets of work including planning and execution and a rigorous feedback and improvement process. The Contractor shall use integrated safety management functions to structure all work activities. These functions include: define the Scope of Work; analyze the hazards; develop and implement hazard controls; perform work within controls;

and, provide feedback and continuous improvement. These functions are to be applied on a continuous cycle and tailored to the work activity. The Contractor shall implement recommendations from other organizations which are accepted by DOE and directed by the Contracting Officer (CO). Compliance with Environment, Safety and Health (ES&H) requirements is a precondition of operations and the earning of fee.

The Contractor shall integrate and manage the safe and effective operation and maintenance of existing and new facilities under their cognizance at SRS to meet the general management goals and performance objectives of this Scope of Work. The Contractor shall use systems engineering techniques to integrate the resources and activities of SRS. The Contractor is responsible for integrating and executing all work under this contract, including but not limited to, management of its personnel and subcontractors at all tiers. The Contractor shall perform in accordance with the terms and conditions herein provided and in accordance with such direction and instruction which the CO or his/her designated representatives of the Department of Energy-Savannah River (SR) and/or National Nuclear Security Administration (NNSA) Savannah River Field Office (SRFO) may provide the Contractor in writing. All project related work shall be conducted in accordance with the principles of DOE Order 413.3B, Program and Project Management for the Acquisition of Capital Assets. The Contractor shall use its expertise and best commercial practices and industry standards in all matters pertaining to the performance of this contract consistent with the provisions of the contract and any direction from the CO.

## **(2.2) General Performance Expectations**

This Scope of Work reflects DOE's overarching expectations for contractor performance. Specific performance work statements and measures, and performance expectations, will be established on an annual or multi-year basis, as appropriate. DOE-SR and NNSA Performance Evaluation and Measurement Plans (PEMP) will be established after contract award to define the performance expectations, incentives, measures, and evaluation processes.

As part of the general performance expectations under this contract, all work shall be conducted in a manner that will assure the safety and health of employees and the public; operated in a manner that is protective of the environment, safeguards classified information, and protects special nuclear and strategic materials.

### **(2.2.1) The Contractor shall:**

- a) Establish and maintain a culture of continuous improvement
- b) Plan strategically in an environment of changing budgets and technical and regulatory requirements
- c) Implement an effective integrated safety, environmental, and security management processes
- d) Integrate cyber security into all management and work practices
- e) Implement and comply with the applicable DOE Program Cyber Security Plan



- f) Ensure products and services meet or exceed customer expectations through an integrated and effective Quality Assurance Program
- g) Use a certified Earned Value Management system for projects and operational activities in order to track progress and increase cost effectiveness
- h) Manage programs and projects to an accurate multi-year performance baseline
- i) Implement an interface management plan to ensure seamless provision of landlord services to other site tenants
- j) Establish a culture of scientific inquiry and technical inquisitiveness
- k) Conduct activities using a project management approach
- l) Maintain and enhance community, regulatory, and stakeholder relationships
- m) Maintain scientific and technical expertise and depth to manage activities through the life of a program while maintaining the ability to address emerging mission needs
- n) Use innovative technologies to reduce costs and improve performance
- o) Use competition to select subcontractors to provide quality supplies and services to achieve the best value to the government
- p) Improve cost effectiveness through the use of innovation, commercial practices and industry involvement
- q) Use benchmarking to compare performance at SRS against best-in-class government and industry organizations and implement improvements
- r) Implement effective work planning, work control, work process feedback and performance improvement systems for all activities
- s) Implement a strategic and operational approach to risk management
- t) Implement a strong Safety Conscious Work Environment
- u) Implement a strong Contractor Assurance System that leverages effective performance metrics to detect organizational performance weakness and drive corporate improvements across the SRS enterprise
- v) Implement industry best practices in the execution of construction project management
- w) Maintain facilities and assets needed to accomplish assigned missions and
- x) Use a disciplined system of management and internal business controls to assure safeguarding of government funds and assets

### **(2.3) Exceptions to the Scope of Work**

The Scope of Work for this PBMC includes all work necessary for management, operation, maintenance, and support of DOE SRS, except as follows:

**(2.3.1)** The Liquid Waste (LW) program, currently performed by Savannah River Remediation, will be the subject of a separate contract until turnover to Deactivation and Decommissioning, and includes:

- a) Operation of the Defense Waste Processing Facility (DWPF) to produce DWPF Canisters and storage in Glass Waste Storage Buildings
- b) Operation of the Salt Waste Processing Facility (SWPF) following transfer of operational responsibility

- c) Operation of Tank Farms to deliver waste feeds and closure of liquid radioactive waste storage tanks and ancillary equipment including evaporators
- d) Management and construction of Saltstone Disposal Units (SDUs) in the Saltstone Disposal Facility (SDF)
- e) Operation of the Saltstone Production Facility (SPF) to process and dispose of low-level waste in the SDF
- f) Operation of the Effluent Treatment Facility (ETF) to process aqueous waste streams and
- g) Management and surveillance of F and H Area Tank Farms, ETF, DWPF, SPF, SDF, and SWPF

**(2.3.2)** Natural resources and forest products management activities currently managed by the U.S. Forest Service (USFS) – Savannah River through an interagency agreement between DOE and the USFS-SR.

**(2.3.3)** Operation of the Savannah River National Laboratory (SRNL) currently managed by Savannah River Nuclear Solutions (SRNS).

**(2.3.4)** Cultural resources management activities currently managed by the Savannah River Archaeological Research Program through a cooperative agreement between DOE and the University of South Carolina.

**(2.3.5)** Basic and applied ecological research, education activities, and outreach efforts currently managed by the Savannah River Ecology Laboratory through a cooperative agreement between DOE and the University of Georgia.

**(2.3.6)** Site paramilitary security services currently managed under a DOE prime contract with Centerra Group, LLC.

**(2.3.7)** Management and operation of the Ameresco Biomass Cogeneration Plant

The CO may withdraw work from the PWS during the course of this contract.

### **(3.0) SCOPE OF WORK - MISSION AREAS**

#### **(3.1) EM Closure Activities**

##### **(3.1.1) Soil and Water Remediation -**

The Contractor shall plan and safely execute a program that meets all regulatory commitments reflected in the SRS Federal Facility Agreement, Resource Conservation and Recovery Act (RCRA) permit and closure plans, settlement agreements, administrative orders, consent decrees, notices of violation(s), Memoranda of Agreements or other notices of direction from DOE and/or regulatory agencies. This includes, but is not limited to, the

identification, characterization, assessment, remediation and post-closure maintenance/monitoring of soil, surface water, groundwater waste units and Deactivation and Decommissioning (D&D) residuals. The Contractor shall implement remedial actions consistent with the Area Completion Strategy. The Contractor shall develop and implement alternative long-range strategies, appropriate technologies, and approaches in the refinement of Area Completion and long-term stewardship to reduce out-year baseline costs.

### **(3.1.2) Deactivation and Decommissioning (D&D)**

The Contractor shall conduct D&D of facilities and their ancillary structures as directed by DOE. The Contractor shall also dispose of structures and facilities related to these facilities, such as sheds, canopies, air conditioning units and excess trailers.

The Contractor shall provide the overall management of the D&D program at SRS. D&D activities may include relocation of existing functions and personnel, characterization, risk analysis, evaluation of alternatives, stabilization, and final decommissioning. All D&D activities shall be conducted through an integrated approach with soil and water remediation requirements in accordance with the established regulatory interaction protocols. D&D activities, and the integrated approach within, must take into account historic properties and historic preservation requirements.

### **(3.1.3) Solid Waste**

The Contractor shall manage the Solid Waste Program to safely and effectively store, treat and dispose of SRS solid wastes including transuranic, low-level radioactive waste, mixed low-level radioactive waste, hazardous, sanitary waste, and construction and demolition. The Solid Waste Program also includes pollution prevention, waste minimization, waste certification, and other waste management support functions. The Contractor shall ensure that the handling, treatment, storage, transportation and disposal of existing “legacy” and newly generated solid waste is environmentally sound and in compliance with DOE Directives, and applicable regulations and requirements.

The Contractor shall manage and integrate site-wide solid waste recycling, treatment, storage, disposal and transportation activities and implement waste minimization/pollution prevention initiatives. The Contractor shall also provide on-site/off-site waste generators with technical support and verification of compliance with waste acceptance criteria, facility safety basis and Disposal Authorization Statement.

#### **(3.1.3.1) Specific scope includes but is not limited to the following:**

- a) Maintaining the Solid Waste management facilities to support site operations, including burial grounds, engineered facilities and the construction debris landfill
- b) Maintaining all stored waste streams in a safe configuration until treatment, processing disposition, or off-site shipment is planned and authorized

- c) Retrieve, characterize, and prepare Transuranic (TRU) waste for shipment off-site. The Solid Waste Program manages the disposition of TRU waste and closure of TRU pads that are located at the SRS
- d) Maintaining an appropriate nuclear safety basis for the waste streams
- e) Supporting treatment, storage, and disposal of newly generated Low-Level Liquid Waste (LLW), Mixed Low-Level Waste (MLLW), hazardous waste, and sanitary waste
- f) Meeting the Waste Isolation Pilot Plant (WIPP) Waste Acceptance Criteria (WAC) and the state of New Mexico RCRA permit requirements
- g) Providing surveillance and maintenance for the Consolidated Incinerator Facility (CIF)
- h) Maintaining and updating as required the Performance Assessment of E-Area to demonstrate appropriate long-term protection of the public and environment following closure of the facilities and
- i) Maintaining and updating, as required, the Composite Analysis for the Savannah River Site to demonstrate appropriate long-term protection of the public and environment

#### **(3.1.4) Nuclear Materials Management and Stabilization**

Note: see above regarding the SRS IMCC Acquisition.

The Contractor shall safely and effectively manage nuclear materials and facilities in accordance with applicable DOE Directives and requirements. Management of nuclear materials at SRS includes four distinct but integral functions: receipt, storage, operations, and disposition.

The Contractor shall operate and maintain F-Area (excluding F Tank Farm), the H-Canyon Complex, K-Area Complex, F/H Laboratory, and L-Area to support storage and disposition of nuclear materials and SNF, as required by DOE. Facilities include large storage tanks used to hold various chemical solutions, industrial support facilities, administrative buildings, sand filter facilities, and supporting utilities including water, steam, electricity, industrial air, conditioned air, underground transfer piping, and sanitary waste systems. The desired outcome is to maintain the general areas, including firewater, utilities, lighting, buildings and grounds maintenance. Support programs shall also be implemented and maintained, including design, construction, nuclear safety documentation, environmental protection, quality assurance, configuration management, criticality safety, safeguards and security, occupational safety and health, conduct of operations, emergency preparedness, training, and all other programmatic requirements. The contractor shall perform necessary lay-up, deactivation and decommissioning work, and long-term surveillance and maintenance on Nuclear Material facilities no longer operating, including the Receiving Basin for Offsite Fuel (RBOF) in H-Area, F-Canyon Complex (including the FB-Line), F/H Laboratory, and F-Area Material Storage (FAMS) Building 235-F.

- a) Perform activities to accept receipts of nuclear materials in support of the non-proliferation program of the United States. These receipts may be from domestic or

foreign sources. Receipt includes the review of the material to ensure the safety of the SRS storage and processing facilities

- b) Perform activities to place and maintain nuclear materials in a safe, secure, and stable form. These materials include spent nuclear fuel located in the L-Area facility complex that may have originated from past operations or from U.S. and foreign research reactors. Storage shall be managed safely, securely, and efficiently to support site and DOE complex-wide consolidation and disposition missions
- c) Operate and maintain the H Canyon Complex to support stabilization and disposition of nuclear materials and spent nuclear fuel, as required by DOE. For planning purposes, DOE has assumed that H Canyon operations will contribute approximately 300,000 gallons per year to the Tank Farm through 2030
- d) Maintain an effective program to facilitate safe and secure nuclear material shipments consistent with the current authorization agreement and subsequent revisions. Stabilize, de-inventory, and transition excess nuclear facilities and ancillary structures for D&D
- e) Continue processing of SNF in H-Canyon to meet site directed mission requirements and to develop future disposition alternatives. This includes bundles of Material Test Reactor (MTR) SNF and High Flux Isotope Reactor (HFIR) cores stored in L Area. The resulting highly enriched uranium solutions will be down blended to meet predetermined user specifications for low enriched uranium (LEU), loaded, and shipped to a Tennessee Valley Authority vendor for fuel fabrication. Future DOE decisions may require the contractor to adapt and modify SNF operations to implement changing Environmental Management missions, including additional fuel types and revised disposition paths. The contractor will also develop plans for the disposition of the remaining SNF for geologic disposal
- f) Operate and maintain the L-Area basin water chemistry, fuel inspection and transport of fuel from L-Area to H-Canyon and maintain the L-Area support facilities and
- g) Manage the storage of the site's inventory of heavy water

#### **(3.1.4.1) H Canyon Complex**

H-Canyon, the nation's only hardened production scale, chemical separation facility remaining in the United States of America is integral to DOE's efforts to minimize and eliminate nuclear materials through safe dissolution and chemical separation, allowing removal and separation of specific isotopes for reuse or proper disposition thereby reducing proliferation risks.

The H-Area facilities support the DOE Enriched Uranium and Plutonium Disposition programs by reducing proliferation risks of nuclear materials in storage throughout the world. The H-Canyon Complex includes "H-Canyon & Outside Facilities, H-Area" and "HB-Line Facility." These nuclear facilities include storage tanks containing various chemical and nuclear material solutions, industrial support facilities, administrative buildings, sand filter ventilation facility, and supporting utilities including water, steam, electricity, industrial air, conditioned air,

underground transfer piping and sanitary waste. In accordance with Public Law 50 U.S. Code 2633: The Secretary of Energy shall continue operations and maintain a high state of readiness at the H-Canyon facility at the Savannah River Site, Aiken, South Carolina, and shall provide technical staff necessary to operate and maintain such a facility. The current approved mission in the Amended Record of Decision is disposition of a limited inventory of the L-Basin inventory of aluminum based SNF necessary to create storage space to complete the fuel return mission. A change to the Public Law will be necessary upon determination that the H-Canyon capabilities are no longer required.

#### **(3.1.4.2) F Canyon Complex (FCC)**

The FCC was constructed in the 1950s to process plutonium and other nuclear materials for national defense purposes and had safely done so for over 50 years. Most of the facilities in the FCC are now deactivated and are being maintained as long-term Surveillance and Maintenance (S&M) facilities. There are no current or future missions planned for the FCC. The FCC and other support facilities are being maintained in a transitional S&M condition. The FCC includes F-Canyon and FB-Line (Building 221-F) and the outside facilities.

#### **(3.1.4.3) Facility Material Storage Building (FAMS)**

The Facility Material Storage Building FAMS is a robust blast resistant, windowless, two-story, reinforced concrete structure. This production facilities mission was the receipt, storage and disbursement of plutonium-bearing materials in support of SRS and the DOE complex. In 2006, the storage vaults for nuclear materials were emptied, and the facility has undergone cleanup and risk reduction activities by removing material at risk.

A portion of the facility is in an S&M mode while other areas have been de-inventoried to reduce Special Nuclear Materials (SNM). The 235-F Building includes Plutonium Fuel Form (PuFF) Facility cells and gloveboxes, Actinide Billet line, Plutonium Experimental Facility and a metallography lab. The contractor may be required to complete the activities for lay-up of Building 235-F into a cold and dark state in preparation for decommissioning.

#### **(3.1.4.4) L Area Complex – Spent Fuel Storage**

L-Area Complex includes the former reactor building, disassembly basin, and support facilities. The facility has been modified and now primarily serves as a radioactive material storage facility. The disassembly basin is a chemically controlled spent nuclear fuel (SNF) wet storage basin. It currently stores and receives SNF from research reactors and other miscellaneous nuclear material to be handled in a safe manner. This includes inspection, cropping, bundling, de-bundling, and re-bundling of fuel. The basin contains approximately 3.4 million gallons of water and varies in depth from 17 feet to 30 feet. The basin walls are below ground and are constructed of thick steel-reinforced concrete. The building has a dedicated cask decontamination facility and a Nuclear Assurance Corporation (NAC) legal weight truck (LWT) cask dry-unloading capability using the shielded transfer system (STS).

The LWT cask plays a major role in the shipment and receipt of Foreign Research Reactor (FRR) fuel due to the various assembly types compatible with the cask and the number of assemblies that can be shipped per cask. The STS is utilized to unload casks in-air due to limited height of the L-Basin cranes and inadequate water depth in the L-Basin transfer pit. Wet storage of spent nuclear fuel (SNF) in L-Basin might be necessary into the 2030s or beyond.

The dry fuel storage area (DFSA) is an enclosed, isolated area located in the southeast corner of the disassembly area. The DFSA is 10 feet wide and 24 feet long, contains minimal combustible material and has a normally closed door. SNF is handled in the disassembly area and stored dry in drums in the DFSA.

The reactor building serves as one of the site's heavy water storage areas. The heavy water is stored in tanks on the -20-foot elevation and in 55-gallon drums located in the process room, crane maintenance area, final storage area, -40-foot elevation crossover area, -40-foot elevation access wells, and the -40-foot elevation motor rooms.

#### **(3.1.4.5) K Area Complex (KAC)**

The K-Area Complex (KAC) includes the previously operational K Reactor Facility. In 1996, DOE directed the contractor to place the K Reactor Facility into a shutdown condition with no capability for restart.

The reactor building has been modified and now serves as a radioactive material storage, surveillance, and processing facility. Although no fuel, targets or rods remain in the reactor tank, it remains for the storage of reactor components and radiological material. DOE plans to continue receiving nuclear material for storage in KAC and other designated areas until alternative interim storage facilities are available, or the final disposition of the material can be accomplished through canyon processing, burial in a geologic repository, or other as-yet-to-be designated disposition.

### **(3.2) NNSA Nuclear Security Activities**

#### **(3.2.1) Defense Programs**

##### **(3.2.1.1) Tritium Program**

The Contractor shall manage the Tritium program support and operations facilities as a defined, severable work activity within the M&O contract structure so that it will be positioned to be responsive to any future direction within the NNSA Nuclear Security Enterprise.

**(3.2.1.1.1)** The Contractor shall conduct the program support and operations of the Tritium Facilities to:

- a) Support the nuclear weapons stockpile by safely and reliably providing tritium and non-tritium loaded reservoirs to the NNSA and Department of Defense (DoD) in accordance with NNSA guidance and direction
- b) Separate and purify extracted tritium to support nuclear weapons stockpile
- c) Recover and recycle tritium
- d) Recover Helium-3 isotope for use in national security and other identified missions
- e) Support the Stockpile Stewardship Program through reservoir surveillance operations and Research and Development support
- f) Support tritium gas processing Research and Development for loading operations and the management of the tritium inventory
- g) Conduct a Plant Directed Research and Development (PDRD) program to retain and recruit individuals with critical skills, maintain core competencies required for current and future technical missions, and increase industrial and university partnerships to enhance technical capabilities
- h) Maintain the Tritium Facilities in a safe, secure and responsive operating condition
- i) Operate the NNSA Tritium operations and activities as a defined, severable cost center business element within the contract to include budget, real estate, human resource management, personnel resources necessary to conduct operations, engineering and required maintenance
- j) Obtain and integrate necessary support from other activities within the contract, or from other contractors, as necessary, to meet mission requirements

### **(3.2.1.2) Plutonium Pit Program**

The Contractor shall manage the proposed plutonium pit production program support and operations as a severable work activity directly under NNSA organizational management that is comparable to the governance of the Tritium Operations management model.

**(3.2.1.2.1)** The Contractor shall conduct program support of the proposed plutonium pit production mission to:

- a) Support activities related to the design, construction and commissioning activities for the proposed Savannah River Plutonium Processing Facility (SRPPF) and support facilities
- b) Establish a program office to manage Savannah River Site pit production activities
- c) Recruit, train and qualify the workforce to conduct pit production operations
- d) Establish, operate and maintain the Training and Operations Center to develop pit production workforce proficiency and to demonstrate prove-in process technology using inert surrogate materials
- e) Establish a supply chain to support pit production operations at SRS
- f) Support the nuclear weapons stockpile by safely and reliably providing plutonium pits in accordance with NNSA guidance and direction
- g) Maintain SRPPF and support facilities in a safe, secure and responsive operating condition
- h) Operate the SRPPF and supporting pit production activities as a defined, severable cost center business element within the contract to include budget, real estate, human



resource management, personnel resources necessary to conduct operations, engineering and required maintenance and

- i) Obtain and integrate necessary support from other activities within the contract, or from other contractors, as necessary, to meet mission requirements

#### **(3.2.1.3) Stockpile Management and Production Modernization (formerly Directed Stockpile Work)**

The Contractor shall support programs supporting four major subprograms that directly support the Nation's nuclear weapons stockpile: (1) Stockpile Major Modernization; (2) Sustainment; (3) Dismantlement and Disposition; and (4) Production Operations.

- a) The Contractor shall conduct Stockpile Major Modernization activities, such as support for current and future warhead Gas Transfer System (GTS) Life Extension Program (LEP), major Modifications (Mods), and Alterations (Alts)
- b) The Contractor shall provide Stockpile Sustainment activities, such as processing tritium and inert reservoirs and associated components in support of the enduring stockpile activities per NNSA production directive requirements. Additionally, Stockpile Sustainment supports enduring Reservoir Surveillance, Stockpile Laboratory Tests, and Life Storage Program activities
- c) The Contractor shall support Dismantlement and Disposition activities, such as unloading, processing and disposition of retired GTS reservoirs
- d) The Contractor shall provide Production Operations activities to support production base capabilities for LEPs, surveillance, and GTS limited life component exchange (LLCE) activities
- e) When SRPPF approaches the operational milestone, the Contractor will support the Stockpile Management programs for the plutonium pit mission
- f) The Contractor shall support Production Modernization programs, such as processing system modernization, to maintain process/manufacturing facility capabilities to support tritium and plutonium pit mission requirements and
- g) The Contractor shall support the ramp-up of tritium and plutonium pit production as described in the Stockpile Stewardship and Management Plan (SSMP), Nuclear Weapons Production & Planning Directive (P&PD), and program direction

#### **(3.2.1.4) Stockpile Research, Technology and Engineering**

The Contractor shall support the Engineering and Integrated Assessment program to ensure weapons performance, reliability, safety, survivability and responsiveness. This is accomplished through activities in Tritium such as component and material lifetime assessments; predictive aging models; and surveillance diagnostics. The Contractor shall develop methods for surveillance of tritium reservoirs and other gas transfer system components.

#### **(3.2.2) Nuclear Nonproliferation Programs**

The Contractor shall provide services in support of the Nuclear Nonproliferation Programs at

SRS. The Contractor shall support both new facilities development activities and program mission support activities as specified below.

- a) Waste Solidification Building (WSB): The Waste Solidification Building will be maintained in a lay-up state until a final decision is made for future disposition
- b) Mobile Plutonium Facility Support: The Contractor shall support the development and use of mobile capabilities (e.g. Mobile Plutonium Facility and Mobile Melt Consolidate system) and teams for the characterization, stabilization, treatment, and packaging of plutonium and other materials as appropriate, including providing personnel, facilities, equipment, packaging, and procurement support
- c) The Contractor shall also provide scientific, technical, program, and project expertise to support the following programs
  - 1) International (Nonproliferation) Programs: The overall mission of Defense Nuclear Nonproliferation international programs is to detect, prevent, and reverse the proliferation of weapons of mass destruction while promoting nuclear safety worldwide. The Contractor shall support NNSA and its other contractors in executing these programs by providing the necessary scientific, engineering and programmatic experts, e.g. nuclear material protection, control, and accountability; nuclear safeguards; emergent threats; export controls; and nuclear verification activities
  - 2) Foreign Research Reactor (FRR) Fuel Program: The Contractor shall assist foreign entities with arranging shipments and supporting shipping activities, be responsible for receipt and storage of spent nuclear fuel at SRS and perform offsite radiological support activities
- d) The Contractor shall also provide scientific, technical, program, and project expertise to support the Surplus Plutonium Disposition (SPD) Program
  - 1) SPD Program: The Contractor is responsible to act as the integrating activity for all participants in the larger SPD Program. This includes other DOE/NNSA Sites, National Laboratories, and sub-contractors. The Contractor is responsible for developing, maintaining, and executing an integrated schedule for the successful conduct of the SPD Program. In addition to developing technical scope requirements, integration includes schedule and cost analysis and tracking
  - 2) Other SPD activities: The Contractor shall provide the expertise necessary to efficiently team with National Laboratories for the development of advanced technologies in order to incorporate advancements in process equipment, automation and robotics into facility operations in support of the SPD mission

### **(3.2.3) Nuclear Emergency Support Team (NEST)**

The Contractor shall provide radiological protection professionals to support the Nuclear Emergency Support Team, specifically the DOE Region 3 Radiological Assistance Program (RAP) and Aerial Measuring System (AMS) assets. DOE Region 3 encompasses the states of Alabama, Florida, Georgia, North Carolina, and South Carolina; however, RAP and AMS support may also be directed outside of Region 3, including OCONUS locations. The mission of RAP is to provide a deployable, tailored capability to assist other Federal, State, Tribal and local agencies, as well as private businesses and individuals, in responding to incidents involving nuclear/radiological materials. RAP also provides training assistance to Federal, State, Tribal, and local agencies to enhance the overall national response capability to a nuclear/radiological event. RAP responds to a variety of crisis response and consequence management missions, such as: incidents involving fixed nuclear facilities, transportation events, lost or stolen radioactive sources, nuclear weapons incidents/ accidents, and terrorist use or threatened use of nuclear/radiological materials. AMS provides an aerial based response for rapid survey of radiation and contamination following a radiological event as well as a search capability for lost or stolen radioactive sources. The Contractor shall maintain a minimum of four full-time staff to assist the DOE/NNSA Regional Program Manager in managing and maintaining programmatic elements (e.g., plans, procedures, training, and equipment readiness) as well as executing the RAP and AMS missions. With augmentation from other SRS contractors, the Contractor shall be principally responsible to ensure a minimum cadre of 21 personnel are assigned the collateral duty to staff the RAP/AMS teams, as directed by NNSA. The Contractor shall ensure that individuals designated to support the RAP/AMS teams are provided the opportunity to participate in required training and drills/exercises to maintain their qualifications. Once position-specific qualifications are completed, personnel are assigned to teams with rotating on-call duties to ensure that one team is continuously ready to respond to requests for offsite radiological assistance within DOE/NNSA response timelines on a 24/7 basis. In addition to their emergency response duties, RAP/AMS personnel will also be made available to support other RAP/AMS missions, such as: training for offsite response partners, exercise participation, and support for Special Events and National Special Security Events.

#### **(3.2.4) Infrastructure and Operations**

The Contractor shall conduct Infrastructure and Operations program work to operate, maintain and modernize the NNSA sponsored facilities (tritium and plutonium pit (when operational)) and support infrastructure to maintain a safe, secure, and cost-effective state of readiness in support of weapons activities mission requirements while minimizing mission risks.

- a) The Contractor shall conduct preventive, predictive, and corrective maintenance of process and infrastructure equipment/facilities
- b) Environment, Safety and Health (ES&H) activities shall be conducted to ensure the well-being of tritium/plutonium pit and other site workers, the public, and the environment
- c) The Contractor shall support program recovery and purification of tritium, deuterium, and helium-3 gases from reservoir recycle gas, hydride storage vessel, and facility effluent-cleanup systems

- d) The Contractor shall perform physical maintenance of various shipping containers, conduct operational and technical activities related to Pressure Vessels, and recapitalization projects
- e) The Contractor shall develop and implement an effective and efficient radioactive waste program for all generated radioactive waste and dispose of such waste in a timely fashion to ensure mission success
- f) The Contractor shall support processing and isotope recovery from Mk-18A target assemblies stored at the Savannah River Site

### **(3.3) Landlord Services and Site Support**

The Contractor shall execute assigned landlord responsibilities and provide a range of services to other organizations doing work on the SRS. This section includes Environmental Safety and Health (ES&H); Engineering and Construction; Operations Support; and Business Services.

#### **(3.3.1) ES&H**

##### **(3.3.1.1) Sitewide ES&H Program**

The Contractor shall conduct a comprehensive ES&H program that provides for the protection of workers, the public, and the environment. The Contractor shall include provisions for the protection of human health and safety and the environment in all activities for which it has contractual responsibilities. The Contractor shall implement, and continuously improve, the existing ES&H program and shall conduct its activities in full compliance with ES&H requirements per applicable laws, regulations, and DOE directives. The Contractor shall include, as a minimum, the following disciplines as part of its ES&H program:

- a) Nuclear safety (including criticality safety)
- b) Occupational, industrial, and construction safety
- c) Industrial hygiene
- d) Quality assurance
- e) Radiation protection
- f) Hazardous material management
- g) Environmental Management System
- h) Environmental permitting and compliance (including NEPA)
- i) Environmental monitoring
- j) Pollution prevention and waste minimization
- k) Technical training and qualification
- l) Conduct of operations and occurrence reporting and
- m) Radiological assistance and/or support for emergency response

As part of its overall performance assurance program, the Contractor shall implement a sitewide ES&H program, including the assumption, management, improvement, and integration of an Integrated Safety Management System (ISMS), that not only covers the

Contractor's organizations but also other organizations performing work for the Contractor via subcontracts and other agreements at SRS. The Contractor shall manage the overall site ES&H program which shall be followed by all site contractors, subcontractors, vendors, and suppliers, as required by their individual contracts or agreements; however, the Contractor shall only be responsible for compliance of its operations and those of its subcontractors and not responsible for the performance or compliance of other contracts over which it possesses no direct contractual relationship. In managing the Site ES&H program, the Contractor shall work with and coordinate with other Site organizations and contractors to ensure consistent programs are implemented at SRS to realize efficiencies and cost savings for the overall Site. The Contractor shall provide appropriate support, as needed, in emergency situations. The Contractor shall also provide ES&H support to others when directed by DOE; this may include activities such as onsite and offsite environmental analysis and assisting in the preparation of required regulatory information.

The Contractor shall implement and maintain a set of requirements to ensure the protection of human health and safety and the environment. In the event the Contractor becomes out of compliance, appropriate action to protect human health and safety and the environment shall be taken until compliance is reestablished. Although the Contractor shall not be responsible for ES&H compliance of other site contractors with which it does not possess a direct contractual relationship, the Contractor shall report to DOE any known or suspected performance of other site contractors which is not in compliance with the site ES&H program requirements.

The Contractor shall work effectively with other site contractors, subcontractors, and external organizations to maintain and improve ES&H performance at SRS. The Contractor shall ensure ES&H excellence in their subcontractor performance and flow-down of all applicable requirements to their subcontractors. The Contractor shall consider ES&H performance as an evaluation factor in the selection of subcontractors performing work in Government owned or leased facilities.

The Contractor shall periodically evaluate the site ES&H program for effectiveness by using management and independent assessments, monitor ES&H performance continuously by the use of ES&H performance indicators, and effect continued ES&H improvement in a cost-effective manner. The Contractor shall use these tools and others identified in its contractor assurance system in the implementation of DOE Order 226.1B, Implementation of Department of Energy Oversight Policy.

#### **(3.3.1.2) Development and Maintenance of Nuclear Safety Documentation**

As part of the overall Site ES&H program, the Contractor shall be responsible for implementing a program that will ensure that nuclear safety requirements are implemented consistently across SRS and for periodically evaluating the program's effectiveness.

The Contractor shall comply with 10 CFR 830 which includes the safety basis and quality assurance requirements for contractors and operators of Hazard Category 1, 2, and 3 DOE

nuclear facilities to develop and maintain a safety basis and to perform work in accordance with the safety basis.

The Contractor shall ensure that facilities that contain many different types of hazards are addressed in a systematic and integrated way. A hazardous facility's safety basis is its specific safety strategy. The Contractor shall operate facilities in accordance with the DOE approved safety basis.

### **(3.3.2) Engineering and Construction**

The Contractor shall perform engineering, design, and construction management as needed for its activities within this Scope of Work and for other SRS activities as directed by the CO. The Contractor shall use appropriate contracting mechanisms for design and construction services, with a preference for fixed-price, performance-based contracting to the maximum extent practicable. DOE reserves the right to assign design and construction management responsibility for individual projects to organizations other than the Contractor.

The scope shown below applies to projects below the Line Item threshold per DOE O 413.3B for capital line item projects, which is currently \$50M. Please see the section “Capital Assets” for line item projects above the \$50M threshold.

The Contractor shall perform the following for its activities and for other activities as directed by the CO.

- a) Engineering, Design and Technical Services. The Contractor shall provide or procure centralized engineering services to implement programs for:
  - 1) Planning and integrating all activities related to engineering, design, procurement, and construction services; Architect-engineering services in accordance with South Carolina Code of Laws Title 40 as required to support design activities
  - 2) Engineering automation to include assumption of maintenance of, and improvements to, the existing SRS computer-based engineering, design, and construction support systems, which include electronic workflow and approval, CAD (Intergraph MicroStation) and 3-D modeling capability (Intergraph PDS)
  - 3) Systems engineering
  - 4) Configuration management
  - 5) Counterfeit and suspect parts
  - 6) All Site geotechnical activities including associated analysis and engineering
  - 7) Pressure protection to include the capability to satisfy the ASME “R” and “U” stamp requirements
  - 8) Nuclear Safety engineering to include criticality engineering
  - 9) Natural phenomena hazards mitigation engineering
  - 10) Engineering document control
  - 11) Process and Control engineering
  - 12) Geographic Information Services

- 13) A systematic project management system which provides cost estimating, scheduling, and change control systems for establishment and maintenance of an appropriate technical baseline
- 14) Non-destructive testing and examination services
- 15) Fire protection system design and engineering
- 16) Welding training and certification program for on-site activities which may include unique and exotic materials and processes and
- 17) Quality assurance and control services to support various site activities that are based on but not limited to International Building Code, ISO 9000, Six Sigma, and ASME NQA-1

b) Construction Management Services. The Contractor shall provide or procure:

- 1) Construction services as required to meet contract requirements
- 2) Capabilities for maintenance and repair of facilities, heavy equipment, and infrastructure
- 3) Services to assume, revise, implement, and maintain an effective construction safety program
- 4) Construction services that satisfy the South Carolina Code of Laws Title 40 requirements for construction contractors and managers
- 5) Construction and fabrication services for existing and new equipment, and existing contaminated equipment and
- 6) Maintenance services for large portable equipment customarily used in providing construction and transportation services

c) Integration Services. The Contractor shall implement, maintain, and/or enhance the following for its activities and for other activities as directed by the CO:

- 1) A Conduct of Engineering and Construction program
- 2) Engineering and construction, and site standards
- 3) Designs that properly reflect all customer/engineering/ construction interfaces and requirements
- 4) A centralized and standardized specification system similar to industry
- 5) A centralized final technical document review system that applies to all site final design and/or final technical documents prior to release for solicitation
- 6) Other construction related services, such as schedule coordination to avoid conflict with other projects; construction site orientation; safety program monitoring; utility service coordination; security badging; determination of progress payments for work accomplished; change management; and management of construction goods and services and
- 7) Cost, technical, and schedule performance measures in subcontracts

### **(3.3.3) Safeguards and Security**

The Contractor shall provide Safeguards and Security services, including Emergency Management programs, as summarized in Section 3.4, for its activities within this Scope of

Work and for other SRS activities as directed by the CO. DOE reserves the right to assign Safeguards and Security responsibilities for individual facilities to organizations other than the Contractor.

### **(3.4) Safeguards, Security, and Emergency Management**

Implement, execute, and manage safeguards, security and emergency management programs at the Savannah River Site (SRS), excluding paramilitary security (Protective Force) services. Ensure the implementation of these programs using a graded approach and the most recent DOE and local threat guidance in the areas of:

- a) S&S Program Planning
- b) Physical Protection
- c) Information Security
- d) Classification
- e) Technical Security
- f) Personnel Security
- g) Nuclear Material Control and Accountability
- h) Foreign Visits and Assignments
- i) Cyber security
- j) Emergency Management
- k) Emergency Response Services

Specific programs include, but are not limited to: vulnerability analysis; DOE Order 470.3C (Design Basis Threat) implementation; facility security plans; S&S training; S&S self-assessments, Argus security system installation, badging; Human Reliability Program (HRP); Homeland Security Presidential Directive (HSPD)-12; Controlled Unclassified Information (CUI); and, export control.

Manage the Technical Security Program, as prescribed by DOE Order 470.6, to include Technical Security Countermeasures (except instrumented services), TEMPEST, Protected Distribution Systems, Wireless Security and Communications Security (except TSCM Services requiring instrumentation), TSP reviews, COMSEC utilization determinations, and TEMPEST reviews.

Manage and oversee the implementation of security areas with integral secure storage and processing facilities to provide protection to a wide array of S&S interests under the Department's purview, including Special Nuclear Material, classified information, unclassified sensitive information, buildings, facilities, Government property, employees and other interests to deter and detect unauthorized access and/or activities.

### **(3.5) Operations Support**

The Contractor shall assist DOE through direct participation and other support in achieving DOE's energy efficiency goals and objectives in conservation and savings, including goals



and objectives contained in Executive Order 13834, "Efficient Federal Operations." The Contractor will maintain and update, as appropriate, its Site Plan (as required elsewhere in the contract) to include detailed plans and milestones for achieving site-specific energy efficiency goals and objectives. The above work scope will be prioritized annually within the DOE-CFO approved funding levels.

The Contractor shall implement site-wide programs and coordinate their implementation with all site organizations. The Contractor shall provide technical support for all its activities and operations. The Contractor shall also provide technical support for other organizations as directed by the CO or as requested by other organizations and approved by the CO. Except as otherwise directed by the CO, services to other contractors generally do not extend to within their facilities or areas under the control of other tenant organizations. These services include, but are not limited to:

- a) Infrastructure maintenance (e.g., roads, bridges, dams, parking lots, and grounds) except as controlled by other tenant organizations
- b) Information Programs
- c) Export Control
- d) Maintenance and repair of facilities and equipment (to include Protective Forces facilities maintenance)
- e) Operation of utility systems including water, sewage, electrical and steam distribution
- f) Transportation and traffic management
- g) Receiving, inspection, and distribution
- h) Site training
- i) Technical and analytical laboratory operations
- j) Facility and site use planning and
- k) Historic preservation
- l) Transportation and mechanical services which include emergency specialty equipment services, transportation services on site and off site (non-nuclear), fuel management (all types), fire protection engineering, and fire test and maintenance (outside the nuclear fence)
- m) Quality Assurance
- n) Procurement and
- o) Records Management

### **(3.6) Business Services**

- a) The Contractor shall provide general planning, management and administrative services for all its activities and for other organizations as directed by the CO. Business services include, but are not limited to:
  - 1) Strategic planning, program planning, and long- and short-range planning
  - 2) Procurement
  - 3) Accounting, budgeting and financial management
  - 4) Personnel administration
  - 5) Labor relations

- 6) Employee concerns
- 7) Information management services, which include information strategic planning, Information Systems development, systems engineering infrastructure upgrades and improvements, system integration and configuration management, desktop/WAN production (operations, Help Desk, maintenance), cyber security program management, communications infrastructure including maintenance of radios (with the exception of the multi-frequency secure radio network consisting of portable, mobile, and fixed station radios maintained by the Security Services contractor), pagers, radio towers, conferencing (video and telephone) and cellular communications.
- 8) Health and human services, which include medical services, injury/illness record-keeping and monitoring, and health physics instrument calibration and distribution
- 9) Real and personal property management
- 10) Legal
- 11) Internal oversight (internal audit and contracts audit)
- 12) Contract Technical Monitoring
- 13) Public affairs and
- 14) Other administrative services

b) The Contractor shall provide project costs in a manner that enables input into the DOE Environmental Cost Analysis System (ECAS) database.

#### **(4.0) STRATEGIC PARTNERSHIPS PROJECTS / TECHNOLOGY TRANSFER**

The Contractor shall conduct Strategic Partnership Projects (SPP) consistent with applicable DOE Directives. All Strategic Partnership Project activities shall be approved in advance, in writing, by the CO.

The Contractor shall perform Strategic Partnership Project activities in accordance with DEAR 970.5217-1 “Strategic Partnership Programs” and DEAR 970.5227-3 “Technology Transfer Mission.” The Contractor shall identify technology transfer opportunities to share with industry. The Contractor shall routinely, as a matter of conducting business, identify and evaluate technologies that are potential candidates for commercial exploitation. Upon CO approval, the Contractor shall establish industry partnerships that will allow the appropriate sharing of technologies using all means allowable under the Stevenson-Wydler Technology Innovation Act of 1980.

#### **(5.0) RESPONSIBILITIES FOR SPONSORSHIP, MANAGEMENT AND ADMINISTRATION OF CONTRACTOR EMPLOYEE PENSION AND OTHER BENEFITS PLANS**

The Contractor shall be the main sponsor of the multiple employer pension plan, herein referred to as the Plan, for employees hired before August 1 2008 (and retired plan

participants) with responsibility for management, administration, funding, coordinating contributions from other plan sponsors and maintaining the qualified status of the plan. The Contractor shall also sponsor and be responsible for management and administration of the Savings Investment Plan and welfare benefit plans for Incumbent Employees. In addition, the Contractor shall sponsor and be responsible for management and administration of the pension and medical benefit plans for Non-Incumbent Employees.

Although the Contractor will be the main sponsor of the Plan, it will only be responsible for funding pension contributions for Incumbent Employees working under this Contract. The contractor for the Liquid Waste contract and other DOE prime contractors will also be participating sponsors of the Plan. These contractors will be responsible for pension contributions for employees employed under their respective contracts.

## **(6.0) CAPITAL ASSETS**

The Contractor shall provide the personnel, systems, processes, equipment, materials, supplies, and services (except as may be furnished by the Government) and otherwise do all things necessary for, or incidental to, the efficient, effective, and safe Engineering, Procurement and Construction (EPC) performance of Capital Construction Projects for either Environmental Management (EM) and the National Nuclear Security Administration (NNSA). The NNSA Capital Construction Projects shall be managed separately from EM sponsored capital line item projects under a separate primary CLIN. Each NNSA Capital Construction Project will be identified as a Sub-CLIN under the contract. The scope, schedule, cost and fee associated with each capital asset project shall be negotiated and accounted separately and shall be completely severable from all other parts of this effort.

These projects will also include specific work requirements (e.g. project title, description of work, delivery schedule [to include major milestones and/or completion dates]), in accordance with DOE O 413.3B and other applicable DOE Orders and guidance documents. When deemed appropriate, DOE-SR or NNSA may also tailor requirements applicable for work to be performed (e.g., portions of DOE O 413.3B) for a given project.

Capital Construction Projects are defined as line item design, procurement and construction, or major equipment installation projects subject to line item appropriations. These projects, by definition, exceed the minor construction threshold, which is currently established as \$50M, but may be changed by Congressional action.

### **(6.1) EM Capital Construction Projects**

#### **(6.1.1) Emergency Operations Center Replacement**

The scope of this project is to design and construct modern, code-compliant emergency management facilities necessary to respond to emergency event scenarios. The primary and alternate Savannah River Site Operations Center (SRSOC) facilities (911 Center) require approximately 10,000 square feet each, and the Emergency Operations Center (EOC) requires approximately 15,000 square feet of space to accommodate approximately 300 people during peak emergency operations.

The current facility that houses the primary SRSOC and EOC is approximately 250,000 square feet. Once the Savannah River Site Operations Center and Emergency Operations Center are relocated to the newly constructed facilities, the existing facility will be available for decommissioning and decontamination, which is not included in the scope of this line item. The existing alternate SRSOC will be relocated to the newly constructed facility and the current facility will be turned over to the M&O for office use.

As part of CD-1 approval, an alternative was selected on which to complete a final design by the Project Management Executive (PME) based on the Independent Analysis of Alternatives and the conceptual design conducted by the M&O contractor. CD-1 was approved in June 2020 with a cost range of \$83M - \$93M. The approved conceptual design package will be used as the basis for a DOE Direct contract request for proposal, which will lead to a bid process and ultimate award of a design/bid/build contract. The M&O will support DOE in the role of owner's representative throughout the project, conducting design reviews, and providing safety, security, and quality assurance support. CD-2/3 approval is anticipated in FY2022 and CD-4 is anticipated in FY 2026 – 2028.

#### **(6.1.2) Security System Replacement Project**

The scope of this project is to replace the existing E3S security system with the DOE Standard Argus System at SRS in the following areas: H-Area, K-Area, L-Area, and the remaining portion of the Savannah River National Laboratory and general site areas.

This project is tailored, as allowed by DOE O 413.3B, to be managed as four distinct subprojects within the overall cost range established at Critical Decision (CD) 1. Each of four subprojects will have their own baseline, total project cost, and independent CD- 2, 3, and 4 approvals. The final CD-4 approval will constitute project completion.

CD-1 was approved on August 10, 2017 with a cost range of \$49M to \$91M and a corresponding CD-4 range of FY 2022 to FY 2028.

The site M&O contractor was determined to be the best contract alternative. The M&O has security cleared personnel already trained and qualified to perform work in the various areas and facilities associated with the project, the ability to use resources interchangeably between areas, and has more flexibility during funding shortfalls that limits risk to the project.

The first subproject, H Area, achieved CD-4 on May 12, 2020 at a Total Project Cost of \$18M. The second subproject, K-Area, anticipates achieving CD-2/3 in FY2022 and CD-4 in FY2025. The third subproject, L Area, anticipates achieving CD-2/3 in FY 2022 and CD-4 in FY2028. The final subproject, Savannah River National Laboratory and general site areas, anticipates achieving CD-2/3 in FY 2027 and CD-4 in FY2028/2029, depending on funding availability.

## **(6.2) NNSA Capital Construction Projects**

### **(6.2.1) Savannah River Plutonium Processing Facility (SRPPF)**

Savannah River Plutonium Processing Facility (SRPPF): The Contractor shall support NNSA program activities in reaching a minimum production rate of 50 pits per year through the repurpose of the of the partially completed robust structure Mix Oxide Fuel Fabrication Facility (MFFF), repurpose of other MFFF support facilities, and the construction of new facilities via a line item construction project.

The proposed SRPPF project will include the design, procurement, construction and cold start-up of a Plutonium Processing Facility. The project involves disassembly and removal of the process equipment and utility commodities intended for the fuel fabrication equipment previously installed in the existing MFFF concrete structure. The project will include the design, construction, and commission of additional administrative, process and balance of plant support facilities. The project will also include the stewardship of transitioned building 226-F and supporting project infrastructure/materials/equipment including all necessary design and quality records.

The Contractor will operate and maintain all administrative, process, and balance of plant support facilities.

### **(6.2.2) Tritium Finishing Facility (TFF)**

The Contractor shall support NNSA's Production Modernization and Stockpile Management missions through the execution of the proposed Tritium Finishing Facility (TFF) line item project, which will build new facilities and refurbish existing facilities to meet NNSA directive requirements.

The proposed TFF complex includes two new buildings, a Hazard Category (HC)-2 nuclear facility and a radiological facility. The Project will also include renovations of existing buildings, removal of three warehouses, construction of one warehouse, and upgrades to utilities and infrastructure to support these facilities. The required utilities are available in the immediate area; however, the Project will require relocation of some of these utilities, the perimeter road and expansion of the perimeter fencing.

There is an option for the Contractor to provide Title II and Title III engineering, construction management, startup and testing.

The Contractor will be the project Design Authority and project integrator

### **(6.2.3) Surplus Plutonium Disposition (SPD) Line Item Project**

The SPD Project will expand the capacity at SRS for downblending plutonium oxide with an adulterant for future disposition at a geologic repository. The four primary activities to be covered by the Project are (1) Un-package plutonium oxide; (2) Dry blend with adulterant; (3) Perform non-destructive assay and packaging; and (4) Stage downblended plutonium oxide/adulterant. The Contractor, under the DOE-Environmental Management (DOE-EM) Program, currently has a small downblending operation in the existing K-Area Interim Surveillance (KIS) glovebox.

The SPD project includes the design, procurement, construction and start-up of downblending glovebox process lines and associated support infrastructure in K-Area facility. The project includes remodeling of a portion of the 105-K Building within the K-Area complex, which is a Hazard Category (HC)-2 and Security Category 1 facility. The project includes the purchase and installation of three glove boxes, process and process support equipment and associated utilities. A HEPA and Electric Building, as well as a diesel enclosure, will be built in an area adjacent to the 105-K Building. Also, the project scope will include disassembly and removal of the equipment and commodities in KAC, pre-construction security modifications and site preparations prior to CD-2/3.

### **(6.3) Other project activities:**

The Contractor shall execute other Line Item and Minor Construction Projects as authorized by DOE/NNSA.